## **Amendment to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Withdrawn) A solvent composition for selective removal of COS from a gas stream containing same, said composition comprising
  - a) at least one polyalkylene glycol alkyl ether of the formula

$$R_1O-(Alk-O)_n-R_2$$
 (I)

wherein  $R_1$  is an alkyl group having from 1 to 6 carbon atoms;  $R_2$  is hydrogen or an alkyl group having from 1 to 4 carbon atoms; Alk is an alkylene group, branched or unbranched, having from 2 to 4 carbon atoms, and n is from 1 to 10; and

b) at least one alkanolamine compound of the formula

$$R_3NHR_4OR_6$$
 (II)

or

at least one piperazine compound of formula

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ R_5 & & & \\ \end{array} \hspace{1cm} (III)$$

wherein  $R_3$  is hydrogen, an alkyl group having from 1 to 6 carbon atoms, or the  $R_4OH$  group;  $R_4$  is a branched or unbranched alkylene group having from 1 to 6 carbon atoms;  $R_5$ , independently in each occurrence, is hydrogen or an hydroxyalkyl group having from 1 to 4 carbon atoms; and  $R_6$  is hydrogen, an alkyl group having from 1 to 6 carbon atoms or an hydroxyalkyl group having from 1 to 4 carbon atoms.

- 2. (Withdrawn) The solvent composition according to Claim 1 wherein the polyalkylene glycol alkyl ether of the formula I is a mixture of polyalkylene glycol alkyl ethers comprising dimethyl ethers of polyethylene glycols of formula CH<sub>3</sub>O(C<sub>2</sub>H<sub>4</sub>O)<sub>n</sub>CH<sub>3</sub> wherein n is from 1 to 10.
- 3. (Withdrawn) The solvent composition according to Claim 2 wherein the mixture of polyalkylene glycol alkyl ethers comprises from about 0 to about 0.5 wt% of diethylene glycol dimethyl ether, from about 5 to about 7 wt% of triethylene glycol dimethyl ether, from about 16 to about 18 wt% tetraethylene glycol dimethyl ether, from about 23 to about 25 wt% of pentethylene glycol dimethyl ether, from about 24 wt% of hexaethylene glycol dimethyl ether, from about 15 to about 17 wt% of heptaethylene glycol dimethyl ether, from about 8 to about 10 wt% of octaethylene glycol dimethyl ether, from about 3 to about 5 wt% of nonaethylene glycol dimethyl ether, and from about 1 to about 2 wt% of decaethylene glycol dimethyl ether.
- 4. (Withdrawn) The solvent composition of Claim 1 wherein the component b) is an alkanolamine of formula II in which substituent  $R_3$  is hydrogen.
- 5. (Withdrawn) The solvent composition of Claim 1 wherein the component b) is monoethanolamine.
- 6. (Withdrawn) The solvent composition of Claim 1 wherein the component b) is an alkanolamine of formula II in which substituent  $R_3$  is an alkyl group having from 1 to 6 carbon atoms or the  $R_4OH$  group.
- 7. (Withdrawn) The solvent composition according to Claim 6 wherein the alkanolamine of formula II is selected from the group consisting of diethanolamine, methylethanolamine and diisopropanoloamine.
- 8. (Withdrawn) The solvent composition of Claim 1 wherein the component b) is piperazine.
- 9. (Withdrawn) The solvent composition of Claim 1 wherein the component b) is hydroxyethylpiperazine.
- 10. (Withdrawn) A process for selective removal of COS from a gas stream containing COS and CO<sub>2</sub>, said process comprising contacting the gas stream with a solvent composition comprising
  - a) at least one polyalkylene glycol alkyl ether of the formula

$$R_1O-(Alk-O)_n-R_2$$
 (I)

62212A Page 3 of 8

wherein  $R_1$  is an alkyl group having from 1 to 6carbon atoms;  $R_2$  is hydrogen or an alkyl group having from 1 to 4 carbon atoms; Alk is an alkylene group, branched or unbranched, having from 2 to 4 carbon atoms; and n is from 1 to 10; and

b) at least one alkanolamine compound of the formula

$$R_3NHR_4OR_6$$
 (II)

or

at least one piperazine compound of formula

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ R_5 & & & \end{array} \tag{III)}$$

wherein  $R_3$  is hydrogen, an alkyl group having from 1 to 6 carbon atoms, or the  $R_4OH$  group;  $R_4$  is a branched or unbranched alkylene group having from 1 to 6 carbon atoms;  $R_5$ , independently in each occurrence, is hydrogen or an hydroxyalkyl group having from 1 to 4 carbon atoms; and  $R_6$  is hydrogen, an alkyl group having from 1 to 6 carbon atoms or an hydroxyalkyl group having from 1 to 4 carbon atoms.

## 11 – 18. (Canceled)

- 19. (Original) A solvent composition for selective removal of COS from a gas stream containing same, said composition comprising
  - a) 1,3-dimethyl-3,4,5,6-tetrahydro-2(1H)-pyrimidinone; and
  - b) at least one alkanolamine compound of the formula

$$R_3NHR_4OR_6$$
 (II)

or

62212A

at least one piperazine compound of formula

$$R_5$$
 (III)

wherein  $R_3$  is hydrogen, an alkyl group having from 1 to 6 carbon atoms, or the  $R_4OH$  group;  $R_4$  is a branched or unbranched alkylene group having from 1 to 6 carbon atoms;  $R_5$ , independently in each occurrence, is hydrogen or an hydroxyalkyl group having from 1 to 4 carbon atoms; and  $R_6$  is hydrogen, an alkyl group having from 1 to 6 carbon atoms or an hydroxyalkyl group having from 1 to 4 carbon atoms.

- 20. (Original) A process for selective removal of COS from a gas stream containing COS and CO<sub>2</sub>, said process comprising contacting the gas stream with a solvent composition comprising
  - a) 1,3-dimethyl-3,4,5,6-tetrahydro-2(1H)-pyrimidinone; and
  - b) at least one alkanolamine compound of the formula

$$R_3NHR_4OR_6$$
 (II)

or

at least one piperazine compound of formula

$$R_5$$
 (III)

wherein  $R_3$  is hydrogen, an alkyl group having from 1 to 6 carbon atoms, or the  $R_4OH$  group;  $R_4$  is a branched or unbranched alkylene group having from 1 to 6 carbon atoms;  $R_5$ , independently in each occurrence, is hydrogen or an hydroxyalkyl group having from

1 to 4 carbon atoms; and R<sub>6</sub> is hydrogen, an alkyl group having from 1 to 6 carbon atoms or an hydroxyalkyl group having from 1 to 4 carbon atoms.

- 21. (Withdrawn) A solvent composition for removal of COS from a gas stream containing same, said composition comprising
  - a) a mixture of N-formylmorpholine and N-acetylmorpholine; and
  - b) at least one alkanolamine compound of the formula

$$R_3NHR_4OR_6$$
 (II)

or

at least one piperazine compound of formula

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ R_5 & & & \\ \end{array} \hspace{1cm} (III)$$

wherein  $R_3$  is hydrogen, an alkyl group having from 1 to 6 carbon atoms, or the  $R_4$ OH group;  $R_4$  is a branched or unbranched alkylene group having from 1 to 6 carbon atoms;  $R_5$ , independently in each occurrence, is hydrogen or an hydroxyalkyl group having from 1 to 4 carbon atoms; and  $R_6$  is hydrogen, an alkyl group having from 1 to 6 carbon atoms or an hydroxyalkyl group having from 1 to 4 carbon atoms.

- 22. (Withdrawn) A process for selective removal of COS from a gas stream containing same, said process comprising treating the gas stream with a solvent composition comprising
  - a) a mixture of N-formylmorpholine and N-acetylmorpholine; and
  - b) at least one alkanolamine compound of the formula

$$R_3NHR_4OR_6$$
 (II)

or

at least one piperazine compound of formula

wherein  $R_3$  is hydrogen, an alkyl group having from 1 to 6 carbon atoms, or the  $R_4$ OH group;  $R_4$  is a branched or unbranched alkylene group having from 1 to 6 carbon atoms;  $R_5$ , independently in each occurrence, is hydrogen or an hydroxyalkyl group having from 1 to 4 carbon atoms; and  $R_6$  is hydrogen, an alkyl group having from 1 to 6 carbon atoms or an hydroxyalkyl group having from 1 to 4 carbon atoms.

- 23. (New) The solvent composition of Claim 19 wherein component b) is an alkanolamine of formula  $\Pi$  in which substituent  $R_3$  is hydrogen.
- 24. (New) The solvent composition of Claim 19 wherein component b) is at least one of monoethanolamine, diethanolamine, methylethanolamine, diisopropanolamine, and 2-(2-aminoethoxy) ethanol.
- 25. (New) The solvent composition of Claim 24 wherein component b) is monoethanolamine.
- 26. (New) The process of Claim 20 wherein component b) is an alkanolamine of formula II in which substituent  $R_3$  is hydrogen.
- 27. (New) The process of Claim 20 wherein component b) is at least one of monoethanolamine, diethanolamine, methylethanolamine, diisopropanolamine, and 2-(2-aminoethoxy) ethanol.
- 28. (New) The process of Claim 27 wherein component b) is monoethanolamine.